

**DETAILED ACTION**

**Response to Arguments**

Applicant's arguments with respect to all pending have been considered but are moot because the arguments do not apply to any of the references being used in the current rejection. Claim 45 was added. This action is made non-final.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained through the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-8-10, 12-13, 15-16, 18-19, 24-25, 27-29, 31-33, 35-38, 40-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Herrington(20040221310) et al in view of Lennon et al, US No.20030070170 .

Re claim 1, Herrington et al disclose a method, comprising: displaying a currently displayed television program on a display (see fig.5, element 116);

activating a navigation system during display of the currently displayed television program, wherein the navigation system determines and displays a set of viewer-selectable attributes for the currently displayed television program overlaid on the currently displayed television program, the set of attributes comprising attributes which are each descriptive of a different aspect of the currently displayed television program, wherein each attribute of the set of viewer-selectable attributes corresponds to a combinable navigation context to generate a navigable sequence of television programs (the program guide may display related program find display screen for the program Seinfeld when a user presses a single user interface key while a video for Seinfeld is displayed in display screen, 0053; the system may present the user with a list of attributes for the given program and may allow the user to select one or more attributes and may allow the user to select which logical operations e.g., and/or operations are to be performed on the attributes, 0008; an overlay having listings for programs which are related to the user-selected program, 0060);

selecting at least two attributes from the set of viewer-selectable attributes using one or more of three navigation keys comprising a previous key, a next key and a select key (the user may select one or more attributes, 0070; have various buttons that can be pressed by the user such as arrow keys e.g., for directing on-screen movement of a highlight region, for directing scrolling functions, etc., an OK, select, enter, or other such selection key for making a selection, 0045);

logically combining the navigation contexts which correspond to the selected at least two attributes using Boolean operators (When plural attributes are selected, the search may be performed using a logical AND or a logical OR function, 0070);

querying a database of television programming metadata for television program identifiers associated with the combined navigation contexts (system may present the user with a list of attributes for the given program and may allow the user to select one or more attributes and may allow the user to select which logical operations e.g., and/or operations are to be performed on the attributes, 0008;; 0063; provide the user with an opportunity to select attributes of interest, 0069).

But did not explicit disclose generating a sequence of television programs associated with the identifiers for navigation wherein the sequence comprises a corresponding navigational axis, the sequence of television programs including the current television program and at least one other television program that shares one or more of the selected attributes with the currently displayed television program ;

navigating the sequence of television programs in the navigation axis, wherein the navigating comprises using the next key or previous key to change from displaying the currently displayed television program in the sequence to displaying another television program in the sequence, wherein the next key or previous key is used to cycle through

the sequence of television programs in the navigation axis without having to access a menu listing the television programs in the sequence for navigating to display of a next television program in the sequence.

However, Lennon et al disclose generating a sequence of television programs associated with the identifiers for navigation wherein the sequence comprises a corresponding navigational axis, the sequence of television programs including the current television program and at least one other television program that shares one or more of the selected attributes with the currently displayed television program(see fig.9; listings providers can supply the programming-related information,0040; the channels are preferably organized in an array of at least one column. When a user selects one of the channels on the channel list 20, such as channel "n", the EPG then automatically switches to the second layer 14 being displayed on the television screen.,0060-0064) ;

navigating the sequence of television programs in the navigation axis, wherein the navigating comprises using the next key or previous key to change from displaying the currently displayed television program in the sequence to displaying another television program in the sequence, wherein the next key or previous key is used to cycle through the sequence of television programs in the navigation axis without having to access a menu listing the television programs in the sequence for navigating to display of a next television program in the sequence(see fig.13; multi-axis navigation button,0069; One of the attributes of the present invention is the ability to use a very simple remote control

42 which comprises simple up and down buttons 46 for navigating through the EPG,0071; the first layer 60 generally comprises a time list 64 which is displayed on the television screen. The time list 64 preferably lists program broadcast times in order; such as by half hour increments. When a user selects one of the times on the time list 64, such as time "t", the EPG then automatically switches to the second layer 62 being displayed on the television screen, user could switch the cursor between the time list 64 and the sub-list 66 to expand or move the channels 25 and corresponding titles 16 for expanding or moving the channels 25 and titles 16 for the selected or highlighted time in the time list, 0072-0074).

It would have been obvious for any person of ordinary skill in the art at that time the invention was made to incorporate the teaching of Lennon into the invention of Herrington for the purpose of allowing users to change list of the channels currently displayed by operating the Up and down buttons on the other side of the screen.

Re claim 2, Herrington et al explicitly disclose wherein the querying is performed by one or more predefined queries and each predefined query is associated with a combinable navigation context (0009; the program guide may provide the user with an opportunity to configure search parameters for searching for related programs based on attributes of the user-selected program,0063 )

Re claim 3, Herrington et al disclose wherein the set of attributes includes an

actor attribute and a director attribute, and wherein logically combining the navigation contexts which correspond to the selected attributes comprises logically combining navigation contexts which correspond to the actor attribute and the director attribute to generate a single actor-director navigational axis (whether a program has the same actor, director, 0051).

Re claim 4, Herrington et al disclose wherein links for launching the one or more predefined queries are associated with television program content (while a video for Seinfeld is displayed in display screen 92. The single user interface key may, for example, be a search key of a remote control for requesting that the system locate related programs, 0053).

Re claim 5, Herrington et al disclose wherein the television program content is included in a conventional broadcast television show (see fig.5).

Re claim 6, Herrington et al did not disclose wherein the television program content is included in one of an on-demand television show or an on-demand television movie.

However, Lennon et al disclose wherein the television program content is included in one of an on-demand television show or an on-demand television movie on demand (facilitates Pay-Per-View (PPV) and Video-on-Demand (VOD) services,0040;

0037; The IEG can allow, amongst other things, interaction with the television, browsing of program listings (schedule data), purchase of TV on-demand events, 0035; 0040).

It would have been obvious for any person of ordinary skill in the art at that time the invention was made to incorporate the teaching of Lennon into the invention of Herrington for the purpose of allowing users to receive on demand contents from service provider according to their request.

Re claim 7, Herrington et al did not explicitly disclose wherein the television program content is included in television musical programming.

However, Lennon et al disclose wherein the television program content is included in television musical programming (digital music channels, 0046).

It would have been obvious for any person of ordinary skill in the art at that time the invention was made to incorporate the teaching of Lennon into the invention of Herrington for the purpose of allowing user to get access to music data or audio content.

Re claim 8, Herrington et al disclose wherein a link is selectable while the television program content is playing (the program guide may display related program

find display screen 94 for the program Seinfeld when a user presses a single user interface key while a video for Seinfeld is displayed in display screen,0053).

Re claim 9, Herrington et al disclose wherein links for launching the one or more predefined queries are associated with television program metadata (descriptions, program type, genre, actors, 0038).

Re claim 10, Herrington et al disclose wherein a link is selectable while the television program metadata is displayed (see fig.7c; The system may present the user with a list of attributes for the given program and may allow the user to select one or more attributes and may allow the user to select which logical operations,0008 ).

Re claim 12, Herrington et al disclose wherein the select key of the navigation controls selects one or more of the combinable navigation contexts(When plural attributes are selected, the search may be performed using a logical AND or a logical OR function,0070).

Re claim 13, Herrington et al disclose further comprising using at least one of the combinable navigation contexts as a logical filter (see fig.7c where user selects "start trek movie" containing Patrick Steward only as attribute).

Re claim 15, Herrington et al disclose wherein the Boolean operators are applied



automatically based on an association between a link for launching a predefined query corresponding to a navigation context and the television program content associated with the link (The system may search television program listings and may display a list of related programs based on the selected attributes, 0008).

Re claim 16, Herrington et al disclose wherein the Boolean operators are applied automatically based on an association between a link for launching a predefined query corresponding to a navigation context and the television program metadata associated with the link(the program guide may locate program listings for programs that have an attribute that matches an attribute of the given program e.g., a common actor, same content, same subject matter, same series, common director, same category, same theme, common production year, etc,0059).

As claim 18, the claimed "displaying content of a currently displayed first television program on a display ; activating a navigation system during display of the content of the currently displayed first television program..; the navigation control navigating the navigational axis by a single key used to cycle through displaying the content of the plurality of television programs identified without displaying a list of the plurality of television programs" is composed as the same structural elements as previously discussed with respect to the rejection of claim 1 with minor modification.

Re claim 19, is met as previously discussed with respect to the rejection of claim 18.

Re claim 24, Herrington et al disclose further comprising displaying program information for each television program in response to the navigation control accessing the television program (see fig.5).

Re claim 25, Herrington et al disclose further comprising: pausing a particular television program at a pause point in response to the navigation control accessing another particular television program of the plurality of television programs; and resuming the particular television program at the pause point in response to the navigation control accessing the particular television program again (resumes watching television, 0085).

Re claim 27, Herrington et al disclose further comprising selecting multiple first attribute values, wherein the multiple first attribute values are combined in the query using Boolean logic operators, wherein the Boolean logic operators are applied automatically(When plural attributes are selected, the search may be performed using a logical AND or a logical OR function,0070).

Re claim 28, Herrington et al disclose wherein the Boolean operators are designated by a context of the currently displayed first television program(may allow the

user to select one or more attributes and may allow the user to select which logical operations e.g., and/or operations are to be performed on the attributes. The system may search television program listings and may display a list of related programs based on the selected attributes, 0008).

Re claim 29, Herrington et al disclose a multi-axis television navigation system, comprising: a server for storing and accessing digital television programming content (see fig.1, element 56; the server e.g., television distribution facility 56 may include a database that may include program listing information, 0048);

the server is configured to receive a query for a database of television program metadata based on one or more television program attributes selected by a viewer in relation to the currently displayed television program and returns a particular navigation axis comprising a list of program identifiers of television programs corresponding to the one or more television program attributes selected(the system may present the user with a list of attributes for the given program and may allow the user to select one or more attributes and may allow the user to select which logical operations e.g., and/or operations are to be performed on the attributes,0008).

But did not explicitly disclose wherein the navigation axis is navigable from display of the currently displayed television program to display of a plurality of different television programs corresponding to the television program identifiers in the list in

response to activation of a single key for cycling through the display of the plurality of different television programs along the particular navigational axis identified by the list.

However, Lennon et al disclose wherein the navigation axis is navigable from display of the currently displayed television program to display of a plurality of different television programs corresponding to the television program identifiers in the list in response to activation of a single key for cycling through the display of the plurality of different television programs along the particular navigational axis identified by the list (see fig. 13; multi-axis navigation button, 0069; One of the attributes of the present invention is the ability to use a very simple remote control 42 which comprises simple up and down buttons 46 for navigating through the EPG, 0071; the first layer 60 generally comprises a time list 64 which is displayed on the television screen. The time list 64 preferably lists program broadcast times in order; such as by half hour increments. When a user selects one of the times on the time list 64, such as time "t", the EPG then automatically switches to the second layer 62 being displayed on the television screen, user could switch the cursor between the time list 64 and the sub-list 66 to expand or move the channels 25 and corresponding titles 16 for expanding or moving the channels 25 and titles 16 for the selected or highlighted time in the time list, 0072-0074).

It would have been obvious for any person of ordinary skill in the art at that time the invention was made to incorporate the teaching of Lennon into the invention of

Herrington for the purpose of allowing users to change list of the channels currently displayed by operating the Up and down buttons on the other side of the screen.

Re claim 31, is met as previously discussed with respect to the rejection of claim 1.

Re claim 32, Herrington et al disclose further comprising a data structure implemented by the server for arranging metadata in a relational schema, wherein the relational schema adheres at least in part to a global listings format (includes television program listings data such as program times, channels, titles, descriptions,0038).

As claim 33, the claimed "a database for television program metadata; a query engine, executed by the computing device, to find program identifiers in the database corresponding to one or more predefined queries, wherein a predefined query returns a navigational axis from the database, wherein a navigational axis is a list of program identifiers of television programs..." is composed as the same structural elements as previously discussed with respect to the rejection of claim 29.

Re claim 35, is met as previously discussed with respect to the rejection of claim 1.

Re claim 36, Herrington et al disclose a multi-axis television program system that comprises a processor coupled to computer readable storage media; a multi-axis database schema implemented by a-the processor executing instructions stored in the computer readable storage media, the schema comprising: instructions for arranging a database of television programming metadata into indices facilitating predefined queries(each set-top box preferably contains a processor to handle tasks associated with implementing an application on the set-top box 62 that assists the user in searching for programs,0050);

wherein: one or more links contextually associated with one or more attributes of a currently displayed television program call the predefined queries, wherein the one or more attributes are selected by a viewer from among a set of attributes and logically combined using Boolean operators (When plural attributes are selected, the search may be performed using a logical AND or a logical OR function, 0070);

each attribute of the set corresponds to a combinable navigation context which can be used for generating a navigable sequence of television programs along a navigational axis; the set of attributes corresponding to the currently displayed television program are automatically determined by the processor and displayed as viewer-selectable attributes when a user interface is activated during display of the currently displayed television program(see fig.5; the program guide may display related

program find display screen 94 for the program Seinfeld when a user presses a single user interface key while a video for Seinfeld is displayed in display screen,0053);

the predefined queries return a list of identifiers from the database corresponding with one or more of the attributes (see fig.5),

each list forms a navigational axis(The attributes may include program genre(s), actors, rating, channel, director, year produced, or any other suitable program attributes,0071),

each identifier in a list corresponds to either an on-demand or currently broadcast television program (the program guide may display a list of programs based on a search of currently available program listings with saved search parameters from an earlier search, 0079);

the television programs on the list are displayed as accessed by a television channel navigation control for navigating one or more navigational axes (see fig.5).

But did not explicitly the television channel navigation control comprises a next key, a previous key and a select key; and the next key or previous key is used to cycle through the television programs corresponding to the list without having to access a

menu listing the television programs in the list for navigating to a next television program in the sequence.

However, Lennon et al disclose the television channel navigation control comprises a next key, a previous key and a select key; and the next key or previous key is used to cycle through the television programs corresponding to the list without having to access a menu listing the television programs in the list for navigating to a next television program in the sequence(see fig.13; multi-axis navigation button,0069; One of the attributes of the present invention is the ability to use a very simple remote control 42 which comprises simple up and down buttons 46 for navigating through the EPG,0071; the first layer 60 generally comprises a time list 64 which is displayed on the television screen. The time list 64 preferably lists program broadcast times in order; such as by half hour increments. When a user selects one of the times on the time list 64, such as time "t", the EPG then automatically switches to the second layer 62 being displayed on the television screen, user could switch the cursor between the time list 64 and the sub-list 66 to expand or move the channels 25 and corresponding titles 16 for expanding or moving the channels 25 and titles 16 for the selected or highlighted time in the time list, 0072-0074).

It would have been obvious for any person of ordinary skill in the art at that time the invention was made to incorporate the teaching of Lennon into the invention of



Herrington for the purpose of allowing users to change list of the channels currently displayed by operating the Up and down buttons on the other side of the screen.

Re claim 37, Herrington et al disclose wherein the one or more attributes include at least one of: type of program, program title, alphabetical order of title, year of release, channel, time, first air date, episode order, episode name, genre, actors, writer, director, producer, rating, sound characteristics, video characteristics, language, subtitles, closeness of match to search criteria, or popularity(the program guide may locate program listings for programs that have an attribute that matches an attribute of the given program e.g., a common actor, same content, same subject matter, same series, common director, same category, same theme, common production year,0059).

Re claim 38, is met as previously discussed with respect to the rejection of claim 1.As claim 38, the claimed " defining a television navigation axes-axis according to attributes of television programs where two-one or more attributes define the navigational axis axes ; receiving a viewer selection of one or more attributes from among the displayed set of viewer-selectable attributes, wherein each attribute displayed is descriptive of a different aspect of a-the currently displayed television program..." is composed as the same structural elements as previously discussed with respect to the rejection of claim 1.

As claim 40, the claimed "displaying a currently displayed television program on a television; activating a navigation system during display of the currently displayed television ..." is composed of the same structural elements as previously discussed with respect to the rejection of claim 1.

Re claim 41, Herrington et al disclose further comprising presenting on the television the navigational axis and at least some information for the television programs that correspond to the television program identifiers(see fig.7c; a common actor, same content, same subject matter, same series, common director, same category, same theme, common production year,0059).

Re claim 42, Herrington et al disclose further comprising during display of the different television program, activating the navigation system again, wherein displaying a different set of viewer-selectable attributes that are descriptive of the different television program, wherein receiving a selection of one or more of the different attributes to create a new list of television program identifiers corresponding to the selected one or more different attributes for creating an additional navigational axis, the additional navigational axis based on results from a different query based on the one or more different attributes(see fig.5; the program guide may display a display screen or, if desired, an overlay having listings for programs which are related to the user-selected program. From the list, the user may find a particular program of interest to the user.

The program guide may provide the user with an opportunity to select a program listing from the list, 0060).

Re claim 43, is met as previously discussed with respect to the rejection of claim 1.

Re claim 44, is met as previously discussed with respect to the rejection of claim 40.

Claim 45 is rejected under 35 U.S.C. 103(a) as being unpatentable over Herrington(20040221310) et al in view of Lennon further in of Brett et al, US No.5450500.

Re claim 45, Herrington et al did not explicitly disclose wherein the set of viewer-selectable attributes includes whether programs included in the navigational access are high definition programs.

However, Brett et al disclose wherein the set of viewer-selectable attributes includes whether programs included in the navigational access are high definition programs (the system is capable of standard- or reduced-definition modification of portions within a high-definition picture, abstract).

It would be obvious for any person of ordinary skill in the art at that time the invention was made to incorporate the teaching of Brett into the invention of Herrington as modified by Lennon for the purpose of allowing users to search for contents having high quality.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean Duclos Saintcyr whose phone number is 571-270-3224. The examiner can normally reach on M-F 7:30-5:00 PM EST. If attempts to reach the examiner by telephone are not successful, his supervisor, Brian Pendleton, can be reached on 571-272-7527. The fax number for the organization where the application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Retrieval (PAIR) system. Status information for published applications may be obtained from either private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, dial 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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